

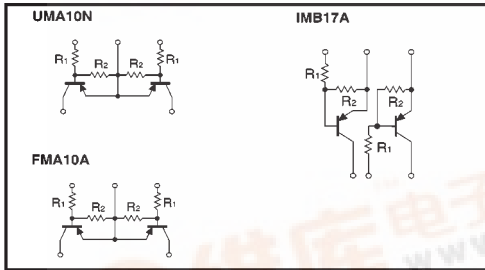
General purpose (dual digital transistors)

UMA10N / FMA10A / IMB17A

●Features

- 1) Two DTA113Z chips in a UMT or SMT package.

●Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-10	V
Output current	I _O	-100	mA
Power dissipation	UMA10N FMA10A, IMB17A	150 (TOTAL)	mW
		300 (TOTAL)	
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-50~+150	°C

*1 120mW per element must not be exceeded.
*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMA10N	FMA10A	IMB17A
Package	UMT5	SMT5	SMT6
Marking	A10	A10	B17
Code	TR	T148	T108
Basic ordering unit (pieces)	3000	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _I (off)	—	—	-0.3	V	V _{CC} =-5V, I _O =-100 μA
	V _I (on)	-3.0	—	—		V _O =-0.3V, I _O =-20mA
Output voltage	V _O (on)	—	-0.1	-0.3	V	I _O /I _I =-10mA/-0.5mA
Input current	I _I	—	—	-7.2	mA	V _I =-5V
Output current	I _O (off)	—	—	-0.5	μA	V _{CC} =-50V, V _I =0V
DC current gain	G _I	33	—	—	—	V _O =-5V, I _O =-5mA
Input resistance	R _I	0.7	1.0	1.3	kΩ	—
Resistance ratio	R ₂ /R ₁	8	10	12	—	—
Transition frequency	f _T	—	250	—	MHz	V _{CC} =-10V, I _E =5mA, f=100MHz

* Transition frequency of the device.

(96-388-A113Z)

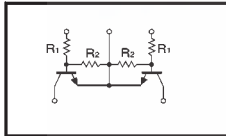
General purpose (dual digital transistors)

UMG10N

●Features

- 1) Two DTC113Z chips in a UMT package.

●Circuit diagram



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	-5	V
Output current	I _O	100	mA
Power dissipation	P _d	150 (TOTAL)	mW
Storage temperature	T _{stg}	-50~+150	°C

* 120mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMG10N
Package	UMT5
Marking	G10
Code	TR
Basic ordering unit (pieces)	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _I (off)	—	—	0.3	V	V _{CC} =5V, I _O =100 μA
	V _I (on)	3	—	—		V _O =0.3V, I _O =20mA
Output voltage	V _O (on)	—	0.1	0.3	V	I _O =10mA, I _I =0.5mA
Input current	I _I	—	—	7.2	mA	V _I =5V
Output current	I _O (off)	—	—	0.5	μA	V _{CC} =50V, V _I =0V
DC current gain	G _I	33	—	—	—	I _O =5mA, V _O =5V
Input resistance	R _I	0.7	1	1.3	kΩ	—
Resistance ratio	R ₂ /R ₁	8	10	12	—	—
Transition frequency	f _T	—	250	—	MHz	V _{CC} =10V, I _E =-5mA, f=100MHz

* Transition frequency of the device.